



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

09/762,073

01/31/2001

Yasufumi Ichikawa

33220

7828

116

7590

06/29/2006

PEARNE & GORDON LLP

1801 EAST 9TH STREET

SUITE 1200

CLEVELAND, OH 44114-3108

EXAMINER

NGUYEN, TU X

ART UNIT

PAPER NUMBER

2618

DATE MAILED: 06/29/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/762,073

Applicant(s)

ICHIKAWA, YASUFUMI

Examiner

Tu X Nguyen

Art Unit

2684

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 February 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-19 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☒ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
- a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Response to Amendment

Applicant's arguments, filed 2/07/06, have been fully considered but they are not persuasive.

In response to Applicants' argument, page 11, 2nd paragraph, "There in no teaching the subscriber station can change a step size based on a detect reception signal state. In contrast, the invention recites that the apparatus thus changes the power step size using this information". The Examiner respectfully disagrees; Ali et al. disclose "the SU detects a pilot signal with sufficient strength to meet a threshold" (see col.10 lines 4-5), reads on "detects a communication state based on the reception power of a received signal transmitted from the distant station" and "in response to the message, the SU adjusts its power control step size to 1.0 DB" (see col.10 lines 10-11) reads on "change a step size based on a detect reception signal state".

Claim Rejections - 35 USC § 112

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claims 11-12 and 14, are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter "calculates" which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Claim Rejections - 35 USC § 102

Art Unit: 2618

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1-6, 10-14 and 19, are rejected under 35 U.S.C. 102(e) as being anticipated by Ali et al. (US Patent 5,896,411).

Regarding claims 1 and 10, Ali et al. disclose a radio communication apparatus having a transmission power control feature for controlling the transmission power of said apparatus by using a transmission power control bit transmitted from a distant station to the apparatus, said apparatus comprising:

a communication state detector which detects the communication state based on the reception power of a received signal transmitted from the distant station to said apparatus (see col.10 lines 4-5); and

transmission power control step range changer which calculates a variable power step amount of a transmission power control step based on the transmission power control bit (see col.6 lines 1-4, "adjust" corresponds to "determine power transmission" in light of page 3 lines 9-10) and also based on the detected communication state (see col.10 lines 3-10); wherein

said apparatus increases or decreases a transmission power of a transmitted signal to the distant station by the varied power step amount in response to the transmission power control bit received from the distant station (see col.7 lines 44-46).

Regarding claims 2-5 and 13, Ali et al. disclose communication state detector has a reception power change detector which detects a change in reception power in a mobile station (see col.4 lines 20-24, "state detector" is inherent by the SU to recognize "the base station may direct each SU to adjust respective reverse link power levels").

Regarding claims 6 and 12, Ali et al. disclose said communication state detector has a control state detector which detects the control state of the local station (see col.6 lines 40-60, the mobile adjust power step sizes based on different control state from a base station reads on "detector which detects the control station").

Regarding claim 11, Ali et al. disclose wherein said communication state detecting step has a reception power change detecting step which detects a change in reception power in a local station, wherein said transmission power control range changing step changes the transmission power control range depending on the detected change in reception power (col.10 lines 3-11).

Regarding claim 14, Ali et al. disclose said transmission power control range changing step calculates the variable power step amount depending on the detected change in transmission power (see col.10 lines 3-11).

Regarding claim 19, Ali et al. disclose a computer-readable recording medium for storing a program for use by a computer for executing the transmission power control method for the radio communications apparatus (see col.6 lines 19-40, it is inherent that the mobile station carries out the processing steps by the stored executable programming instructions).

Claim Rejections - 35 USC § 103

Art Unit: 2618

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 7, 9, 15 and 18, are rejected under 35 U.S.C. 103(a) as being unpatentable over Ali et al. in view of Minami et al. (US Patent 6,587,510).

Regarding claims 7 and 15, Ali et al. fail to disclose compares a previous reception power with a current reception power.

In an analogous art, close loop power control, Minami et al. disclose, compares a previous reception power with a current reception power (see col.12 lines 35-40). Therefore, It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Ali et al. with the above teaching of Minami et al. in order to decide of the judged results of control data is an error and control transmission power more correctly.

Regarding claims 9 and 18, the Ali et al. fail to disclose compares the reception power with a predetermined threshold.

Minami et al. disclose compares the reception power with a predetermined threshold (see col.6 lines 18-21). Therefore, It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Ali et al. with the above teaching of Minami et al. in order minimize fluctuation to adjusting transmission power base on comparison I/C with threshold level.

7. Claims 8 and 16-17, are rejected under 35 U.S.C. 103(a) as being unpatentable over Ali et al. in view of Kubo et al. (US Patent 6,249,682)

Regarding claims 8 and 16-17, Ali et al. fail to disclose a fading pitch of reception power.

In an analogous art, transmission power signal is varying when the device is moving away or closer to the fixed station, Kubo et al. disclose a fading pitch of reception power (see col.5 lines 5-9). Therefore, It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Ali et al. with the above teaching of Kubo et al. in order to detect the fading when a mobile is moving at a certain speed.

Conclusion

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

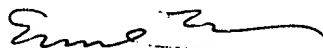
A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tu Nguyen whose telephone number is 571-272-7883. The examiner can normally be reached on Monday through Friday from 6:30AM-2:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Urban, can be reached at (571) 272-7899. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

June 22, 2006


EDWARD F. URBAN
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600